

CLAIMS

What is claimed is:

1. A weatherproof electrical enclosure comprising:

a base;

a cover; and

a first movable hinge clip for pivotably connecting the base to the cover.

2. The enclosure of claim 1, wherein the enclosure is dimensioned for use with a single gang receptacle.

3. The enclosure of claim 1, wherein the enclosure is dimensioned for use with a double gang receptacle.

4. The enclosure of claim 1, wherein the cover is transparent.

5. The enclosure of claim 1, further comprising a gasket for promoting a weatherproof seal between the base and a support structure.

6. The enclosure of claim 5, wherein the base comprises a rear wall, and further, wherein the gasket is affixed to an outer surface of the rear wall.

7. The enclosure of claim 1, wherein the base comprises a top base wall, a bottom base wall, two side base walls, and a rear wall, wherein the top, bottom and side base walls define a base opening and further, wherein the cover comprises a front cover wall, a top cover wall, a bottom cover wall and two side cover walls, wherein the top, bottom and side cover walls define a cover opening.

8. The enclosure of claim 7, further comprising at least one cable opening disposed on the bottom cover wall.

9. The enclosure of claim 8, wherein the at least one cable opening is covered by a removable cable cap.

10. The enclosure of claim 8, wherein the at least one cable opening is shielded by a

hood.

11. The enclosure of claim 7, further comprising at least one cable opening disposed on a side cover wall.

12. The enclosure of claim 11, wherein the at least one cable opening is covered by a removable cable cap.

13. The enclosure of claim 11 wherein the at least one cable opening is shielded by a hood.

14. The enclosure of claim 7, further comprising:

a base lip extending perpendicular to and outwards from forward edges of the top, bottom and side base walls; and

an L-shaped cover flange extending perpendicular to and outwards from rear edges of the top, bottom and side cover walls, wherein a distal end of the cover flange extends rearwards and further, wherein the cover flange is dimensioned to complement the base lip to form a waterproof seal when the cover is in a closed position.

15. The enclosure of claim 14, further comprising a cover lip adjoining an outer surface of the distal end of the cover flange, wherein the cover lip runs along a periphery of the cover flange and further, wherein the cover lip is dimensioned to overlap the base lip when the cover is in the closed position.

16. The enclosure of claim 15, further comprising:

a base flange disposed perpendicular to an upper surface of the base lip and running along a periphery of the base opening;

a tongue disposed perpendicular to the upper surface of the base lip at a distance outwards from the base flange and running along the periphery of the base opening; and

a groove positioned on an edge of the distal end of the cover flange adjacent to a border where the cover lip adjoins the cover flange, wherein the groove runs parallel to the

cover opening and further,

wherein the tongue form fits the groove to form a first watertight seal and an outer surface of the base flange lies in surface-to-surface engagement with an inner surface of the distal end of the cover flange to form a second watertight seal when the cover is in the closed position.

17. The enclosure of claim 14, further comprising:

a first hinge assembly positioned on an outer surface of the top base wall;

a second hinge assembly positioned on an outer surface of a hinge-side base wall;

a top mounting rail positioned perpendicular to a front surface of the cover flange adjacent and parallel to an outer surface of the top cover wall; and

a side mounting rail positioned perpendicular to the front surface of the cover flange adjacent and parallel to an outer surface of a hinge-side cover wall.

18. The enclosure of claim 17, wherein the hinge clip comprises:

a rail hook positioned at a top end of the hinge clip and disposed facing inwards;
a pin hook positioned at a bottom end of the hinge clip and disposed facing the rail hook; and

a lip hook positioned at a distance from the rail hook and disposed facing the rail hook.

19. The enclosure of claim 18, further comprising:

a first hinge stop positioned along an inner surface of the top mounting rail;

a second hinge stop positioned along an inner surface of the side mounting rail;

and

a notched ridge disposed at a distal edge of the rail hook, wherein the notched ridge is dimensioned to snap fit the first and second hinge stop.

20. The enclosure of claim 17, further comprising:

a first rail flange extending perpendicularly from a non-corner end of the top mounting rail to the outer surface of the top cover wall; and

a second rail flange extending perpendicularly from a non-corner end of the side mounting rail to the outer surface of the hinge-side cover wall.

21. The enclosure of claim 17, wherein the top mounting rail and the side mounting rail are separated by an upper notch disposed adjacent to and running parallel with a corner where the top cover wall and hinge-side cover wall meet and further, wherein an inner surface of the cover lip has a lower notch running parallel to the upper notch.

22. The enclosure of claim 17, further comprising:

a second movable hinge clip;

a third hinge assembly positioned on the outer surface of the top base wall and disposed collinear with the first hinge assembly; and

a fourth hinge assembly positioned on the outer surface of the hinge-side base wall and disposed collinear with the second hinge assembly.

23. The enclosure of claim 7, further comprising a latch mechanism for keeping the cover in a closed position, the latch mechanism comprising:

a base tab extending outwards from an outer surface of the base adjacent to the base opening;

a hook assembly comprising an L-shaped latch flange extending outwards from an outer surface of the cover adjacent to the cover opening, wherein a distal end of the latch flange extends rearwards and further, wherein the latch flange extends outwards from the cover at a distance sufficient to allow the distal end of the latch flange to engage the base tab when the cover is in the closed position.

24. The enclosure of claim 23, wherein the latch mechanism further comprises a locking

assembly comprising an upper padlock hole disposed in the latch flange and a lower padlock hole disposed in the base tab, wherein the upper and lower padlock holes register with each other when the cover is in the closed position.

25. The enclosure of claim 7, further comprising a latch mechanism for keeping the cover in a closed position, the latch mechanism comprising:

a base tab extending outwards from an outer surface of the base adjacent to the base opening;

a hook assembly comprising a latch flange extending outwards from an outer surface of the cover adjacent to the cover opening and a locking clip pivotably mounted along a distal end of the latch flange perpendicular to the latch flange, wherein the latch flange extends from the cover at a distance sufficient to allow the locking clip to engage the base tab when the cover is in the closed position.

26. The enclosure of claim 25, wherein the latch mechanism further comprises a locking assembly comprising an upper padlock hole disposed in the latch flange and a lower padlock hole disposed in the base tab, wherein the upper and lower padlock holes register with each other when the cover is in the closed position.

27. The enclosure of claim 1, further comprising a cover plate, the cover plate comprising:

an upper recess disposed on a top corner:

a first horizontally elongated mounting hole disposed on an opposite top corner;

a lower recess disposed on a bottom corner diagonally opposite from the upper corner where the upper recess is disposed; and

a second horizontally elongated mounting hole disposed on an opposite bottom corner.

28. The enclosure of claim 27, wherein the cover plate further comprises a set of

removable ribs, the set of removable ribs comprising:

a center rib disposed at about the center of the cover plate, wherein removal of the center rib creates a first rectangular opening;

a pair of generally circular shaped aperture ribs having a flat top portion and a flat bottom portion, the pair of aperture ribs comprising a first aperture rib disposed above the center rib, wherein a portion of a top end of the center rib extends into a bottom end of the first aperture rib and a second aperture rib disposed below the center rib, wherein a portion of a bottom end of the center rib extends into a top end of the second aperture rib;

a pair of insert ribs comprising a first insert rib disposed on the first aperture rib and a second insert rib disposed on the second aperture rib, wherein removal of the center rib, aperture ribs and insert ribs creates a first circular opening, a second circular opening and an insert space;

a pair of side ribs comprising a first side rib disposed on a side of the center rib and a second side rib disposed on an opposite side of the center rib; and

a first, second, third and fourth corner rib, wherein the first and second corner ribs are respectively positioned on opposite ends of the top of the first aperture rib and the third and fourth corner ribs are respectively positioned on opposite ends of the bottom of the second aperture rib and further, wherein removal of the center rib, aperture ribs, insert ribs, side ribs and corner ribs creates a second rectangular opening.

29. The enclosure of claim 28, wherein each side rib has a slot disposed adjacent and perpendicular to the center rib and the insert ribs have an ear disposed on each side thereof and further, wherein the slots and ears are dimensioned to snap fit together.

30. The enclosure of claim 27, wherein the cover plate further comprises:

a circular opening disposed at about the center of the cover plate; and

a set of removable concentric ribs, the set of removable ribs comprising at least

one removable concentric rib, wherein removal of the concentric rib increases the size of the opening.

31. A weatherproof electrical enclosure comprising:

a base mountable on a support structure, the base comprising a top base wall, a bottom base wall, two side base walls, and a rear wall;

an adjustable-position cover comprising a front cover wall, a top cover wall, a bottom wall and two side cover walls; and

a movable hinge clip for pivotably connecting the base to the cover

32. The enclosure of claim 31, further comprising a cover plate, the cover plate

comprising set of removable ribs, the set of removable ribs comprising:

a center rib disposed at about the center of the cover plate, wherein removal of the center rib creates a first rectangular opening;

a pair of generally circular shaped aperture ribs having a flat top portion and a flat bottom portion, the pair of aperture ribs comprising a first aperture rib disposed above the center rib, wherein a portion of a top end of the center rib extends into a bottom end of the first aperture rib and a second aperture rib disposed below the center rib, wherein a portion of a bottom end of the center rib extends into a top end of the second aperture rib;

a pair of insert ribs comprising a first insert rib disposed on the first aperture rib and a second insert rib disposed on the second aperture rib, wherein removal of the center rib, aperture ribs and insert ribs creates a first circular opening, a second circular opening and an insert space;

a pair of side ribs comprising a first side rib disposed on a side of the center rib and a second side rib disposed on an opposite side of the center rib; and

a first, second, third and fourth corner rib, wherein the first and second corner ribs are respectively positioned on opposite ends of the top of the first aperture rib and the third

and fourth corner ribs are respectively positioned on opposite ends of the bottom of the second aperture rib and further, wherein removal of the center rib, aperture ribs, insert ribs, side ribs and corner ribs creates a second rectangular opening.

5 33. The enclosure of claim 32, wherein the cover plate further comprises an upper recess disposed on a top corner, a first horizontally elongated mounting hole disposed on an opposite top corner, a lower recess disposed on a bottom corner diagonally opposite from the upper corner where the upper recess is disposed, and a second horizontally elongated mounting hole disposed on an opposite bottom corner.

10 34. The enclosure of claim 31, further comprising a first cable opening positioned on the bottom cover wall and a second cable opening positioned on a side cover wall.

35. The enclosure of claim 34, wherein the first and second cable openings are each covered by a removable cable cap and shielded by a hood.

36. The enclosure of claim 31, further comprising:

15 a base lip extending perpendicular to and outwards from forward edges of the top, bottom and side base walls;

an L-shaped cover flange extending perpendicular to and outwards from rear edges of the top, bottom and side cover walls, wherein a distal end of the cover flange extends rearwards and further, wherein the cover flange is dimensioned to complement the base lip to form a waterproof seal when the cover is in a closed position.

20 37. The enclosure of claim 36, further comprising:

a first hinge assembly positioned on an outer surface of the top cover wall;

a second hinge assembly positioned on an outer surface of a hinge-side cover wall;

a lip extension extending from an outer edge of the base lip co-planar with the base lip, the lip extension running along a periphery of the base lip from a top of the base and down a side of the base adjacent to a hinge-side base wall;

a top base mounting rail positioned adjacent to the top base wall perpendicular to and running parallel with an outer edge of the lip extension;

a side base mounting rail positioned adjacent to a hinge-side base wall perpendicular to and running parallel with the outer edge of the lip extension.

38. The enclosure of claim 37, wherein the hinge clip comprises:

a pin hook positioned at a top end of the hinge clip and disposed facing inwards;

a lower rail hook positioned at a bottom end of the hinge clip and disposed facing the pin hook; and

an upper rail hook positioned at a distance from the lower rail hook and disposed facing the lower rail hook.

39. The enclosure of claim 36, further comprising:

a first hinge assembly positioned on an outer surface of the top base wall;

a second hinge assembly positioned on an outer surface of a hinge-side base wall;

a top mounting rail positioned perpendicular to a front surface of the cover flange adjacent and parallel to an outer surface of the top cover wall; and

a side mounting rail positioned perpendicular to the front surface of the cover flange adjacent and parallel to an outer surface of a hinge-side cover wall.

40. The enclosure of claim 39, wherein the hinge clip comprises:

a rail hook positioned at a top end of the hinge clip and disposed facing inwards;

a pin hook positioned at a bottom end of the hinge clip and disposed facing the rail hook; and

a lip hook positioned at a distance from the rail hook and disposed facing the rail hook.

41. The enclosure of claim 31, further comprising a latch mechanism for keeping the cover in a closed position, the latch mechanism comprising:

5 a base tab extending outwards from an outer surface of the base adjacent to the base opening;

a hook assembly comprising a latch flange extending outwards from an outer surface of the cover adjacent to the cover opening and a locking clip pivotably mounted along a distal end of the latch flange perpendicular to the latch flange, wherein the latch flange extends
10 from the cover at a distance sufficient to allow the locking clip to engage the base tab when the cover is in the closed position.

42. The enclosure of claim 41, wherein the latch mechanism further comprises a locking assembly comprising an upper padlock hole disposed in the latch flange and a lower padlock hole disposed in the base tab, wherein the padlock holes register with each other when the cover
15 is in the closed position.

43. A hinge apparatus suitable for use in an electrical enclosure having a cover and a base, the hinge apparatus comprising:

a first hinge mounting disposed on an outer surface of a top of the base;

a second hinge mounting disposed on an outer surface of a side of the base;

20 a first mounting rail disposed on an outer surface of a top of the cover;

a second mounting rail disposed on an outer surface of a side of the cover; and

a movable hinge clip for pivotably connecting the cover to the base, the hinge clip comprising a first hook disposed at a top end of the base for attaching the top end of the hinge clip to the first or second mounting rail and a second hook disposed at a bottom end of the
25 hinge clip for attaching the bottom end of the hinge clip to the first or second hinge mounting.

44. A cover plate suitable for use with a weatherproof electrical enclosure, the cover plate comprising:

an upper recess disposed on a top corner;

a first horizontally elongated mounting hole disposed on an opposite top corner;

5 a lower recess disposed on a bottom corner diagonally opposite from the upper corner where the upper recess is disposed; and

a second horizontally elongated mounting hole disposed on an opposite bottom corner.

45. The cover plate of claim 44, further comprising a set of removable ribs, the set of
10 removable ribs comprising:

a center rib disposed at about the center of the cover plate, wherein removal of the center rib creates a first rectangular opening;

a pair of generally circular shaped aperture ribs having a flat top portion and a flat bottom portion, the pair of aperture ribs comprising a first aperture rib disposed above the
15 center rib, wherein a portion of a top end of the center rib extends into a bottom end of the first aperture rib and a second aperture rib disposed below the center rib, wherein a portion of a bottom end of the center rib extends into a top end of the second aperture rib;

a pair of generally square shaped insert ribs comprising a first insert rib disposed on the first aperture rib and a second insert rib disposed on the second aperture rib, wherein
20 removal of the center rib, aperture ribs and insert ribs creates a first circular opening , a second circular opening and an insert space;

a pair of generally trapezoidal shaped side ribs comprising a first side rib disposed on a side of the center rib and a second side rib disposed on an opposite side of the center rib; and

a first, second, third and fourth generally triangular shaped corner rib, wherein the first and second corner ribs are respectively positioned on opposite ends of the top of the first aperture rib and the third and fourth corner ribs are respectively positioned on opposite ends of the bottom of the second aperture rib and further, wherein removal of the center rib, aperture ribs, insert ribs, side ribs and corner ribs creates a second rectangular opening.

46. The enclosure of claim 45, wherein each side rib has a slot disposed adjacent and perpendicular to the center rib and the insert ribs have an ear on each side and further, wherein the slots and ears are dimensioned to snap fit together.

47. The cover plate of claim 45, further comprising:

a circular opening disposed at about the center of the cover plate; and
a set of removable concentric ribs comprising at least one removable concentric rib, wherein removal of the concentric rib increases the size of the opening.